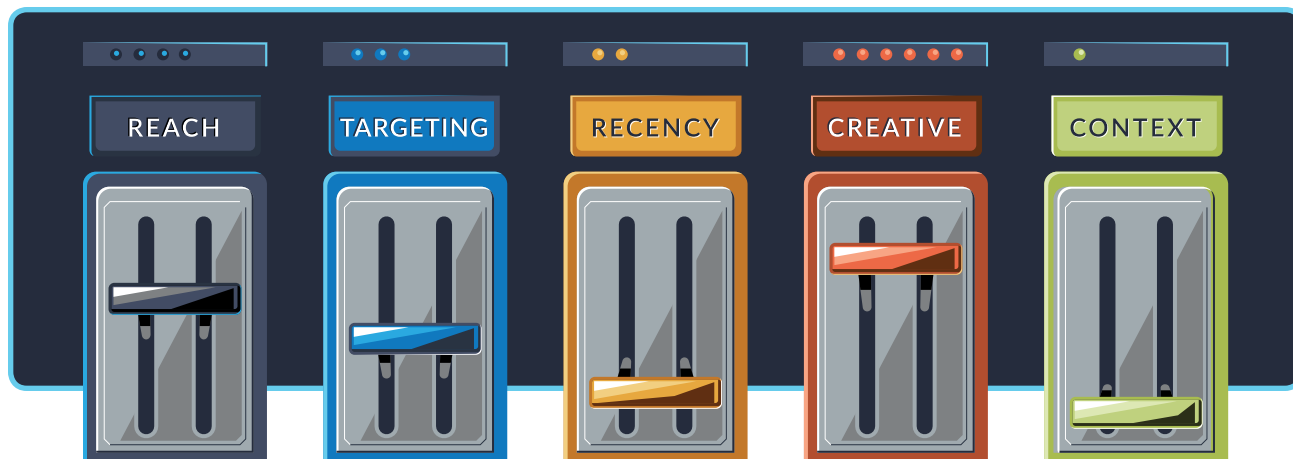# FIVE KEYS TO ADVERTISING EFFECTIVENESS
QUANTIFYING THE IMPACT OF ADVERTISING ON SALES   *3rd Edition — August 2017*

MEET THE STUDIES

Study #1: The objective of this study was to examine the relative contribution that a campaign's creative and media factors might have on sales.

NCS looked at nearly 500 CPG campaigns that ran in 2016 and Q1 of 2017 on all major media platforms: linear and addressable television, online digital and video, mobile, magazines and radio.

Study #2: The goal of this study was to understand the reach of TV and digital campaigns, and more importantly to measure the unduplicated reach of cross media campaigns.

Nielsen examined 863 campaigns that ran on both linear TV and digital platforms and were tagged by Nielsen Total Audience Ratings (TAR) and Nielsen Digital Ad Ratings (DAR). These included ALL cross- media campaigns that ran in Q4, 2016 and Q1, 2017, regardless of vertical or television network. While the intended targets for these campaigns varied, the reach curve for these analyses are shown for people 13+.

BACKGROUND

We tend to think of advertisng as an incredibly stable industry. Ad expenditures rise and fall with the economy but have hovered around 1.5% of GDP for nearly a century. But we stand at a critical juncture. People are splitting their time among more media platforms than ever before—TV, of course, but also digital, mobile, radio, over-the-top, social, magazines, etc.—and thousands of new brands are launched every year to compete for attention and hard-earned dollars. It's become an enormous jigsaw puzzle for advertisers to reach consumers convincingly.

Research and measurement tools have progressed by leaps and bounds, and many advertisers today expect complete accountability for their ad investments. It's in that spirit that CBS has sponsored many industry-wide studies over the years, bringing together best-in-class data and analysis resources to understand this new advertising landscape, develop new metrics and measurement paradigms, and help raise the bar for everyone.

This paper by Nielsen and Nielsen Catalina Solutions (NCS) is based on two new meta-studies and more than 10 years of experience linking advertising to sales results. The project was created to prove that advertising not only works, but works well, and can be as accountable to sales as other elements in the marketing mix. Promotion, for instance, had been gaining much traction until the last two years, when the tide was stemmed and advertising began to regain a small bit of share back. If the ad industry wants to really grow its share in the mix, it needs to demonstrate a strong return on investment and the ability to capitalize on the latest tools, technologies and best practices.

This research represents the most comprehensive analysis of the television/digital advertising landscape to date, quantifying the sales contribution of the five key drivers of advertising's effectiveness—creative, reach, targeting, recency and context—and how the relative balance has changed over time.

KEY TAKEAWAYS

- As in 2006, creative quality is the most important factor for driving sales, but most likely due to new breakthroughs in data and technology, media is playing a much larger role than before.

- Less than half of all campaigns are doing a good job of targeting buyers of the brand or category—80% of TV campaigns are On-Buyer Target and 31% of digital campaigns are On-Buyer Target.

- TV ads generally have consistently high quality creative—as opposed to digital ads, which have a wider range of quality, including both much higher and much lower.

- For large cross media campaigns, reach still comes primarily from television.

- Understanding consumer purchase cycles and timing advertising closer to purchases can boost sales dramatically.

THE TOPLINE: SHIFTING SANDS

In 2006, Project Apollo studied the sales effect of advertising using one of the industry's first single-source databases and found that 65% of a brand's sales lift from advertising came from the creative, including the quality and the messaging. Media contributed 15% of the lift and "other factors" contributed 20%. We now know that these other factors are primarily brand attributes, or the intrinsic characteristics of a brand. In contrast, the 2017 study found that 49% of a brand's sales lift from advertising could be attributed to the quality of the creative, 36% to media and 15% to brand attributes.

There was a time when creative dominated the effectiveness mix. However, as media planning, buying and execution have become more "data driven," we're seeing a significant shift toward the media side of the equation.

When we break down those media components, reach has the most to contribute (22%), followed by targeting (9%), recency (5%) and context (2%). *(See Figure B.)*

By context we mean "the creative message in context" or the surrounding programming which has elements of both creative and media, though we chose to group it with creative. Note that this study included six CPG brands for television. The context was measured by using the exact same television commercials within each of the brand's schedules across a variety of programs and dayparts. Given the scope of this analysis, the jury is still out. We believe that the score we measured in this analysis indicates the minimum contribution that context can have.

The balance between the sales effectiveness of creative vs. media is dynamic. There are differences by platform, whether the creative is good or bad, whether the media reached buyers of the category or missed the mark, and whether there was enough reach. In the following sections, we'll review these nuances in more detail.

This paper often refers to "creative vs. media" as a framework for analysis. The researchers combined reach, targeting and recency into a single "media" group since these distinct factors all pertain to components of media planning and buying. With this grouping, we can more easily understand a campaign's intrinsic creative qualities and its extrinsic media placement characteristics. The contributions of creative and media don't add up to 100% of a campaign's overall effect because there are other brand attributes that have an impact on sales—price, for instance, or brand penetration, weekly dollar sales, etc. We refer to these as "brand factors."

Figure A below provides respective roles of creative, media and brand factors in a campaign's overall performance for in-store sales and how today compares to ten years ago.

FIGURE A.
PERCENT SALES CONTRIBUTION: CREATIVE vs. MEDIA

2006 Project Apollo

Media 15%
Other 20%
Creative 65%

2016-Q1 2017

Media 36%
Brand 15%
Creative 49%

Source: Nielsen Catalina Solutions

FIGURE B.
PERCENT SALES CONTRIBUTION BY ADVERTISING ELEMENT
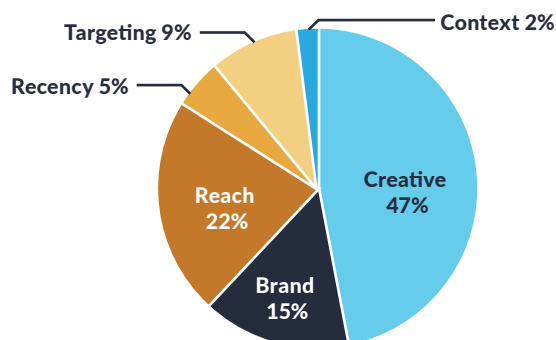
Nearly 500 campaigns across all media platforms.
Source: Nielsen Catalina Solutions ©2017; Period 2016-Q1 2017

Context was measured for common commercials within dayparts for CPG. We believe this indicates the minimum contribution that Context can have.
Recency's contribution is as currently practiced. NCS has measured instances where Recency could double the effects of advertising.
See "The Persuadables" research by NCS/Joel Rubinson/Viant, April 2017.

CREATIVE

As in 2006, creative quality is still is the most important factor for driving sales. But thanks to new breakthroughs in data and technology, media is playing a much larger role than ever before, especially on television, where creative quality has become very consistent.

According to this research, creative quality contributes as much to a brand's in-market success as all other factors combined.

By and large, creative is still king. But its reign is under pressure, especially in television, where decades of copy-testing and learning by the major creative agencies have fostered an environment where most ads are top-shelf. In this environment, it's the "media" that impacts the performance of the ads, and paradoxically, the difference in the performance comes from the media side of the equation. When we focus on TV campaigns in our study (both linear and addressable), the contribution from creative is substantially lower (37%) than the contribution from media (50%).

On the other hand, for the digital campaigns in this study, the contribution from creative is much higher (56%) than the contribution from media (30%), with very consistent results across video, display and mobile campaigns. *(See Figure C.)*

In the case of digital campaigns, the gap between really good and really bad ads remains significant. Here, the quality of the creative is paramount. Even the best media plan won't save a campaign with poor creative. In fact, while the average creative productivity metric is virtually the same for both television and digital ($0.08), there are wide swings in quality for digital—almost twice the standard deviation of television. *(See Figure C.)*

What is a Strong Creative?

Many metrics were used to perform this analysis. One of the key metrics is a productivity measure, which calculates incremental sales for every purchase occasion that is influenced by advertising. A campaign typically boosts sales for a brand by $0.08 dollars for every purchase occasion in that brand's product category that was exposed prior to that purchase. (*See explanation below.) While this may sound small, these pennies add up to big dollars when combined across every exposed category purchase occasion. For every creative, we judged whether it was weak, average or strong based on these benchmarks:

	Incremental Sales per Exposed Purchase
Weak	Less than 2 cents
Average	Between 2 and 7 cents
Strong	7 cents or more

FIGURE C.
ALL TV vs. ALL DIGITAL

Sales Contribution **Creative – Productivity Metric & Standard Deviation**

TV *(Linear & Addressable)*

37% · 50% · 12%

-$0.12 · $0.08 · +$0.12

Digital *(Video Display & Mobile)*

56% · 30% · 15%

-$0.21 · $0.08 · +$0.21

■ BRAND ■ CREATIVE ■ MEDIA
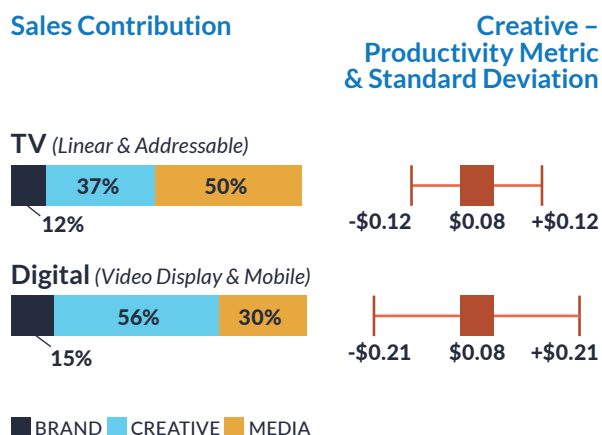
Source: Nielsen Catalina Solutions ©2017; Period 2016-Q1 2017

* WHAT IS THE SALES PRODUCTIVITY METRIC?

NCS measures the total incremental sales lifts for the households exposed to the advertising, then divides it over the total number of exposed households' category store trips. We know that the sales are incremental because they are compared to a control group of nearly identical households that were not exposed to the advertising.

This sales productivity metric used in the analysis removes the cost of the media and measures the sales responsiveness without factoring in the media economics, targeting, reach, seasonality and flighting.

INCREMENTAL SALES ÷ **EXPOSED CATEGORY TRIPS** = **PRODUCTIVITY METRIC**

+14%

Unexposed HHs   Exposed HHs

28 Days Prior

Exposed Purchase Occasions

Unexposed Purchase Occasions
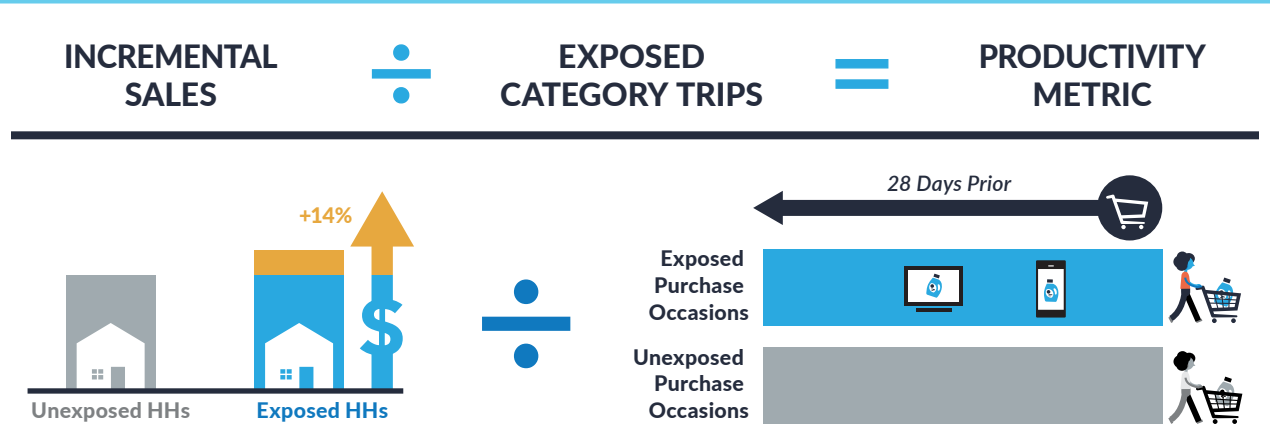
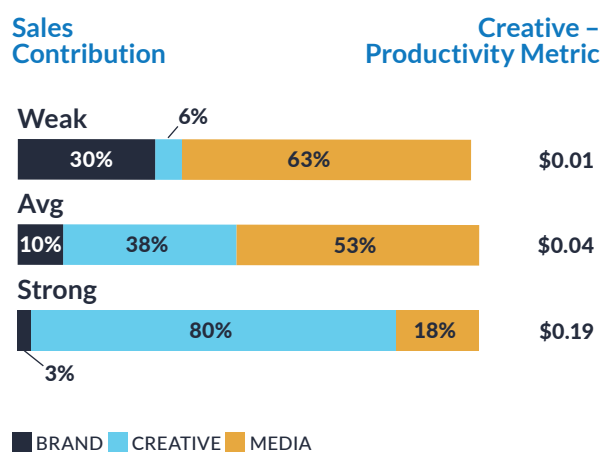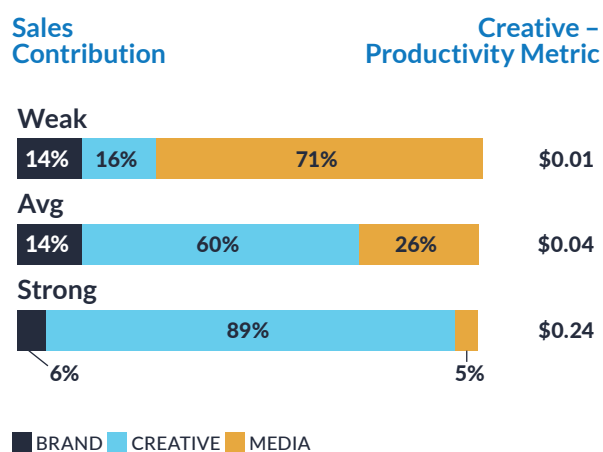## WEAK/AVERAGE/STRONG CREATIVE—HOW DOES THIS CHANGE MEDIA'S CONTRIBUTION?

When we break down the results by the quality of the creative, it's not surprising to find that when the creative is weak, the sales lift is weak and comes primarily from the media side of the equation. That's true for both TV and digital campaigns. This relationship is reversed when the creative is strong—the incremental sales are higher and media then has a much smaller contribution to sales. *(See Figures D and E.)*

FIGURE D.
TV – BY CREATIVE PERFORMANCE

Sales Contribution			Creative – Productivity Metric

Weak
6%
| 30% | | 63% | $0.01 |

Avg
| 10% | 38% | 53% | $0.04 |

Strong
| | 80% | 18% | $0.19 |
3%

■ BRAND ■ CREATIVE ■ MEDIA

Source: Nielsen Catalina Solutions ©2017; Period 2016-Q1 2017

FIGURE E.
DIGITAL – BY CREATIVE PERFORMANCE*

Sales Contribution			Creative – Productivity Metric

Weak
| 14% | 16% | 71% | $0.01 |

Avg
| 14% | 60% | 26% | $0.04 |

Strong
| 6% | 89% | 5% | $0.24 |

■ BRAND ■ CREATIVE ■ MEDIA

* Display & Mobile yielded nearly identical results.
Source: Nielsen Catalina Solutions ©2017; Period 2016-Q1 2017

MEDIA: REACH

*For cross media campaigns, reach still comes primarily from television.*

It may seem obvious, but reaching a large number of consumers with advertising is critical to the success of a campaign: only consumers exposed to an ad can be influenced. This study examined 863 recent cross media campaigns across all verticals and measured the volume of impressions for each of them, as well as the reach achieved with those impressions. *Figures F and G* show a scatter plot of all campaigns against those two dimensions.

The shape of the curve offers a visual confirmation of a well-known law of diminishing returns: past a certain point, most new impressions end up reaching the same people. But note the stark differences between the TV and digital components of the curve. Very few digital campaigns can match the reach of a TV campaign with the same number of impressions, and the vast majority of them are concentrated in the low volume/low reach corner of the graph.

When we combine the TV and digital components of those campaigns, it's clear that for the campaigns studied, digital added limited incremental reach on
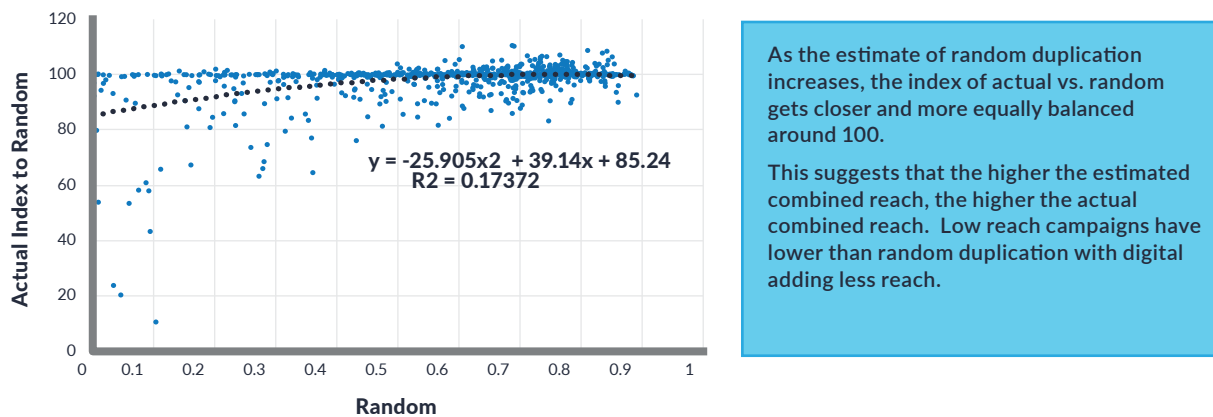
top of the television base. In fact, *Figure F* shows that the average reach of the TV portion of a typical cross media campaign is 58% of the target, vs. 2% for the digital portion. If the goal is for digital to extend the reach of television, it is necessary for media buys to specifically address this requirement.

FIGURE F.
REACH: TV & DIGITAL CURVE FOR CROSS MEDIA CAMPAIGNS
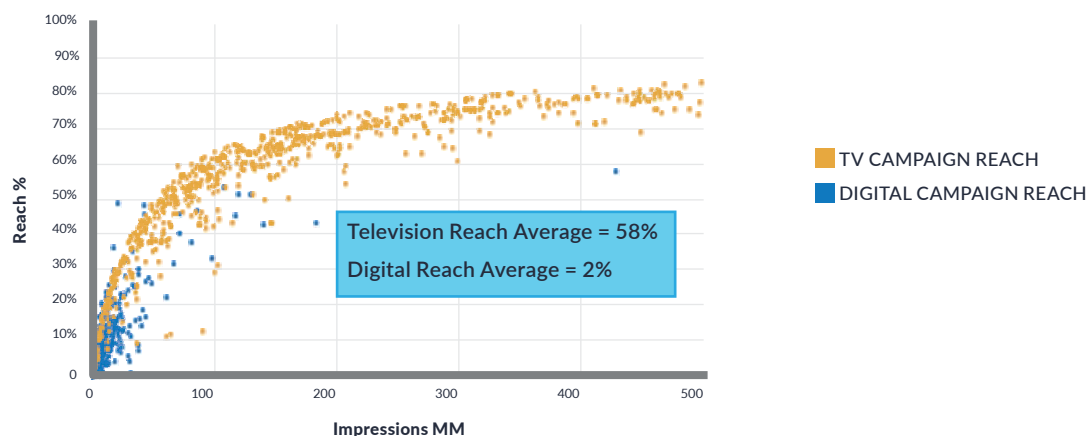
Television Reach Average = 58%
Digital Reach Average = 2%

■ TV CAMPAIGN REACH
■ DIGITAL CAMPAIGN REACH

Nielsen: 863 TV & digital cross media campaigns from Q4 2016 – Q1 2017 on P13+; No advertiser verticals excluded.
Analysis performed by Nielsen Catalina Solution

FIGURE G.
ACTUAL DUPLICATION vs. INDEX TO RANDOM (*RANDOM=100*)

$y = -25.905x^2 + 39.14x + 85.24$
$R^2 = 0.17372$

As the estimate of random duplication increases, the index of actual vs. random gets closer and more equally balanced around 100.

This suggests that the higher the estimated combined reach, the higher the actual combined reach. Low reach campaigns have lower than random duplication with digital adding less reach.

Nielsen: 863 TV & digital cross media campaigns from Q4 2016 – Q1 2017 on P13+; No advertiser verticals excluded.
Analysis performed by Nielsen Catalina Solution

DIGITAL DOESN'T EXTEND THE REACH OF TV CAMPAIGNS WITH LESS THAN 60% REACH

The mantra for digital reach has been that digital extends the reach of television. *Figure G* shows that this is not true for television campaigns with lower reach. Random duplication estimates the contribution one medium can have on another if the audiences are randomly duplicated. Instead of digital delivering non-TV viewers, the reach of the combined media is consistently lower than random for campaigns with less than 60% reach. One would expect the opposite if digital were extending reach. It isn't until the campaigns are very large (over 60%) that we see the combination of digital and TV deliver both higher and lower than random reach. In other words, when digital campaigns are "large," meaning reach that is greater than 60%, we see that digital does sometimes add incremental reach.

MEDIA: TARGETING

Less than half of all campaigns are doing a good job of reaching people who are buyers of the brand or category.

With much recent focus on precision targeting, it is surprising that less than half of all campaigns are doing a good job of reaching brand or category buyers. To better understand this finding, this project closely examines the balance of creative, media and brand factors in total and by media platforms.

To measure the effectiveness of targeting, a purchase-based segmentation (see sidebar) was used to examine delivered audience and sales lift. By computing incremental sales for each segment and using ROAS for validation, campaigns were categorized as:
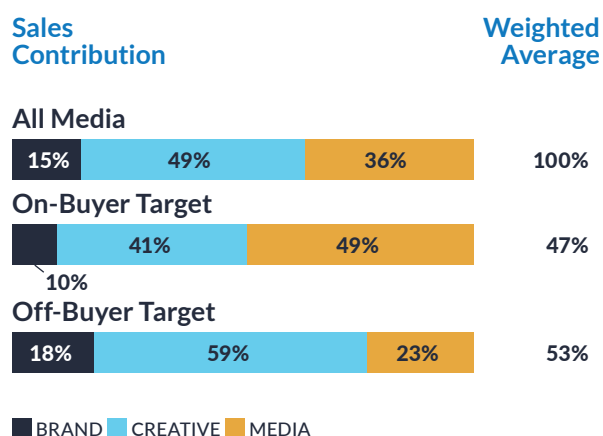
On-Buyer Target:
media delivery skewed towards brand or category sales

Off-Buyer Target:
media delivery flat or skewed away from brand or category sales

When a campaign is On-Buyer Target, media plays a larger role in driving sales than the creative (and the opposite is true when a campaign is Off-Buyer Target). For the campaigns that are On-Buyer Target, media drove 49% of the sales contribution and creative 41%. For campaigns that were Off-Buyer Target, creative contributed to 59% of sales, with media at 23%. *(See Figure H.)*

FIGURE H.
ALL MEDIA: ON-BUYER TARGET vs. OFF-BUYER TARGET

Sales Contribution **Weighted Average**

All Media
| 15% | 49% | 36% | 100% |

On-Buyer Target
| 10% | 41% | 49% | 47% |

Off-Buyer Target
| 18% | 59% | 23% | 53% |

■ BRAND ■ CREATIVE ■ MEDIA

Source: Nielsen Catalina Solutions ©2017; Period 2016-Q1 2017

PURCHASE-BASED SEGMENTATION

Segmenting the population based on previous buying behavior—known as purchase-based segmentation—is an innovative way to examine the effectiveness of a campaign. For every brand, there are people who have never bought it and even people who have never bought any product in that entire category (e.g. baby products for households without children). Those consumers won't be very likely to respond to advertising for that brand.

Even among those who have bought the brand before, some are loyal to it while others are more inclined to switch between that brand and its competitors. If we look deeper, we see that some people might be light, medium or heavy buyers of a product category, and when they shift brands, the dollars that shift with them can make a big difference or a small difference. For example, a loyal consumer of Red Baron pizza might also be a heavy buyer of frozen pizza in general, and that greater "appetite" for frozen pizza might make them a good target for, say, DiGiorno's pizza. As heavy category buyers, when they shift brands the value of that shift is substantial.

Purchase-based segmentation is a natural way to analyze ad effectiveness. For each segment, it's possible to determine the reach of the campaign and compute the actual incremental sales lift. Adding the media expenditure data, it's possible to produce the return on ad spend (ROAS)—that is, revenue generated by ad dollars spent. Earlier research shows that this framework is superior to traditional age and gender segmentations for quantifying the in-store sales impact of an ad campaign, and it was used throughout this study to establish baselines and evaluate individual campaign performance.

MEDIA: TARGETING BY PLATFORM

80% of television campaigns are On-Buyer Target, compared to only 31% of digital campaigns.

How We Determined Targeting Effectiveness

To judge targeting effectiveness, the study measures how the impressions delivered to the buyer target performed, relative to the impressions delivered off-buyer target. While there are many targeting strategies, ideally, a targeting strategy should align with the ability of the creative to create sales among that target. What often happens is that the targeting strategy, the marketing strategy and the creative efficacy are not all in alignment.

To measure how well these are aligned, NCS developed a 13-cell grid that segments households based on their brand loyalty and extent of category purchasing. If the marketing strategy is "retain current customers" or "build equity" then we examine the delivery of impressions and reach to existing buyers as well as how powerful the creative was at driving incremental purchases among those buyers. If the strategy is "conquest share from competition," we examine that pattern of media delivery and creative effectiveness. *(See Figure I.)*

NCS uses this 13-cell grid to measure a variety of elements. The two key measures are "Coverage of Purchase Occasions" and "Incremental Sales per Exposed Category Purchase." Incremental Sales per Exposed Category Purchase measures the effect on sales of an exposure delivered just prior to a category purchase *(See Figure C.)*

"Coverage of Purchase Occasions" is the reach of those same category purchases—with the exposure happening within 4 weeks prior to the purchase. These measures are determined for each segment in a 13-cell grid that arrays the dimensions of brand loyalty and category spend levels. *(See Figures I and J.)*

FIGURE I.
COVERAGE (REACH) OF PURCHASE OCCASIONS

	Category Buyers	New Brand Buyers	Brand Buyers			Average
			Non-Loyal	Switchers	Loyal	
Light Category Buyers		xx%	xx%	xx%	xx%	
Medium Category Buyers	xx%	xx%	xx%	xx%	xx%	xx%
Heavy Category Buyers		xx%	xx%	xx%	xx%	

FIGURE J.
INCREMENTAL SALES PER CATEGORY PURCHASE

	Category Buyers	New Brand Buyers	Brand Buyers			Average
			Non-Loyal	Switchers	Loyal	
Light Category Buyers		$yy	$yy	$yy	$yy	
Medium Category Buyers	$yy	$yy	$yy	$yy	$yy	$yy
Heavy Category Buyers		$yy	$yy	$yy	$yy	

When the skew of media and creative are aligned, then the pattern of colors match. In other words, the skew of Coverage of Purchases need to be aligned to the Incremental Sales per Category Purchase.

When a brand delivers the media aligned or skewed to purchasers of the brand and/or category, we say that the campaign is "On-Buyer Target." An "On-Buyer Target" campaign is defined as campaigns with higher than .2 correlation of either brand or category sales across the 13 cells. *(See Figure K.)*

FIGURE K.
ON-BUYER TARGET EXAMPLE

Coverage of Category Purchase Occasions	New Category Buyers	New Brand Buyers	Brand Buyers			Total
			Non-Loyal	Switchers	Loyal	
Light Category Buyers		61.2%	61.3%	61.9%	62.7%	
Medium Category Buyers	61.1%	60.1%	61.5%	62.1%	64.0%	**61.0%**
Heavy Category Buyers		59.9%	61.9%	63.4%	65.7%	

When a brand delivers media that are flat or not aligned to purchasers of the brand and/or category, we say that the campaign is "Off-Buyer Target." An "Off-Buyer Target" campaign is defined as a campaign with a correlation below .2 of either brand or category sales across the 13-cells. These include campaigns that are flat with no skew or campaigns that are negatively correlated to sales. *(See Figure L.)*

FIGURE L.
OFF-BUYER TARGET EXAMPLE

Coverage of Category Purchase Occasions	New Category Buyers	New Brand Buyers	Brand Buyers			Total
			Non-Loyal	Switchers	Loyal	
Light Category Buyers		62.7%	65.7%	63.4%	61.2%	
Medium Category Buyers	64.0%	61.1%	61.5%	61.3%	62.1%	**61.5%**
Heavy Category Buyers		60.1%	61.9%	61.9%	59.9%	

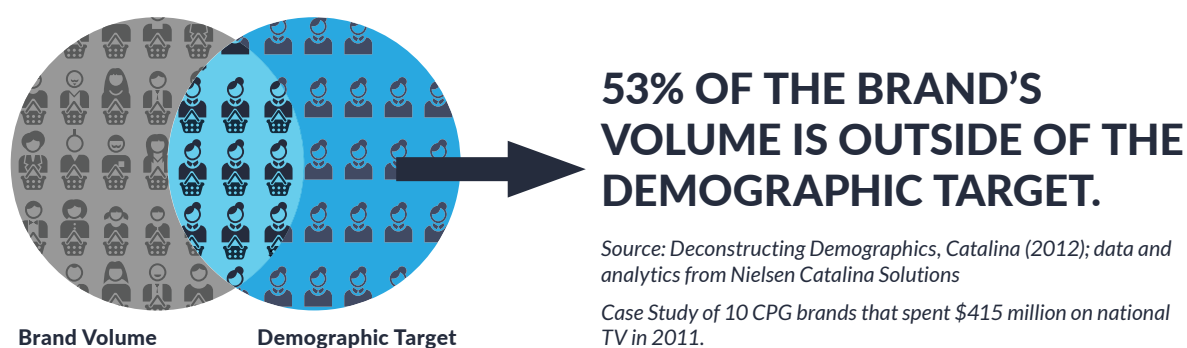## Why Doesn't Digital Do a Better Job of Targeting Buyers?

One of the most unexpected findings was that for television in total, 80% of the campaigns were considered On-Buyer Target, and only 31% of the digital campaigns were On-Buyer Target. *(See Figure N.)*

If reach is considered a core strength of television, targeting is considered a core strength of digital. Digital delivers targets well, but what are the targets that advertisers and their agencies are selecting? No theoretical assumptions here—we looked at real campaign performance. It is apparent from this analysis that the targets that are being selected are not buyer targets and/or advertisers are intentionally targeting

non-buyers. While it's clear that there's a lot of room for improvement, in order to know how and where, the data was examined by each media platform.

Why is the targeting performance so poor for digital—especially considering the availability of increasingly sophisticated targeting algorithms and systems? Earlier research found that age and gender-based demographic targeting does not effectively capture category and brand consumers. Nonetheless, many advertisers are still buying digital on oversimplified demographic groups e.g., women 18–49, boomers, millennials, etc. *(See Figure M.)*

FIGURE M.
TARGET BUYERS TO DRIVE INCREMENTAL RETAIL SALES

Brand Volume   Demographic Target

53% OF THE BRAND'S VOLUME IS OUTSIDE OF THE DEMOGRAPHIC TARGET.

Source: Deconstructing Demographics, Catalina (2012); data and analytics from Nielsen Catalina Solutions

Case Study of 10 CPG brands that spent $415 million on national TV in 2011.

Many advertisers also believe that targeting non-buyers will help them grow their brands, when in fact this strategy typically leads to sub-optimal sales lifts and negative ROAS.

Why is the targeting performance so high for TV—especially considering that linear TV cannot target consumers directly? Heavy TV viewers tend to be larger families and tend to be heavier purchasers of consumer packaged goods. The measure of "On-Buyer Target" is a low correlation of .2. This low a correlation indicates a slight skew towards buyers, which is what TV is able to deliver.

This doesn't mean that targeting is a dead end. Quite the opposite, actually with a purchase-based framework, the right data and the right infrastructure partners to implement and monitor their decisions, advertisers have much to gain by upgrading their targeting capabilities. And the role played by targeting in the overall ad effectiveness equation is bound to grow substantially in the coming years.

EXPLAINING ON-BUYER TARGET VS. OFF-BUYER TARGET

"On-Buyer Target" is defined as campaigns with higher than .2 correlation of either brand or category sales; "Off-Buyer Target" was defined as anything below that—which include no skew or negatively correlated to sales.

FIGURE N.
TARGETING: ON-BUYER TARGET vs. OFF-BUYER TARGET

All Television Campaigns

On-Buyer Target
80%

Off-Buyer Target
20%

Digital Campaigns

On-Buyer Target
31%

Off-Buyer Target
69%
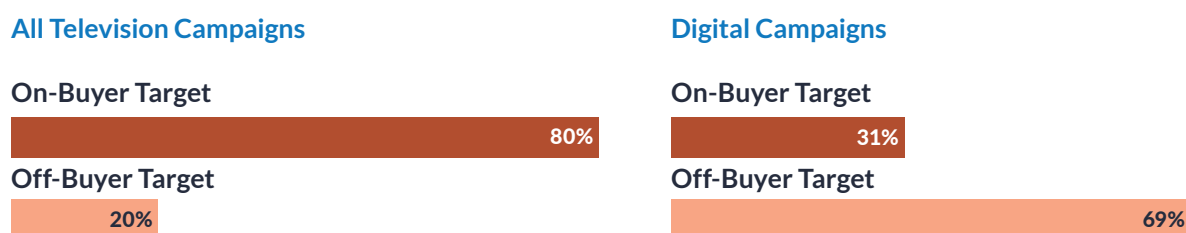
Source: Nielsen Catalina Solutions ©2017; Period 2016-Q1 2017

> *Undeniably, the industry today has access to more data and better tools to understand consumer behavior and optimize advertising plans. But our research shows that, by and large, advertisers aren't making the most of these capabilities. Targeting, in particular, is often underused—even misused. While the strength of creative still carries a lot of weight in advertising, we fully expect that future growth for the industry will come from reach, targeting and other media drivers.*

—Leslie Wood, Ph.D.,
Chief Research Officer, NCS

MEDIA: RECENCY

Understanding consumer purchase cycles and timing advertising closer to purchases can boost sales dramatically.

Previous research demonstrates how exposure to an ad just before a purchase occasion (generally in the preceding 48 hours) results in a stronger conversion to sales. To further test the recency effect, this study focused on products and services that are likely to be purchased on the weekend. The hypothesis was that ad exposure on Thursday or Friday night (during primetime) should have a greater impact on weekend sales than ad exposure (also during primetime) earlier in the week.

For products most often bought during the weekend, advertising on Thursday or Friday had a dramatic effect on sales. Thursdays outperform Fridays (3.5× vs. 2.3×), but together they delivered almost three times more incremental sales lift than other days of the week. *(see Figure O.)*

The theory of recency was also part of a recent study in which NCS participated, *The Persuadables*[1]. NCS segmented exposed audiences by purchase cycles and determined the effect on ROAS. The study found that when the ads were timed during the last quintile of a household's purchase cycle, the ROAS was double the return of ads that were exposed earlier in the purchase cycle. The study also examined recency among heavy purchasers and found them to provide up to 16× the ROAS of the average segment.

In today's world, many retailers and advertisers have access to granular first-party data about their customers' shopping behavior. They can tabulate historical purchases and understand when someone might be close to making a new trip to the store and what items they'll be in the market for. This research is further encouragement to make the most of those rich datasets, build systems to understand consumer purchase cycles and buy ads on the right platform and at the right time.

The importance of understanding the complexities of recency continues to grow as time shifting TV increases, affecting these dynamics.

FIGURE O.
RECENCY: THURSDAY/FRIDAY PRIME DRIVES WEEKEND SALES

Sales Index vs. Any Other Programming
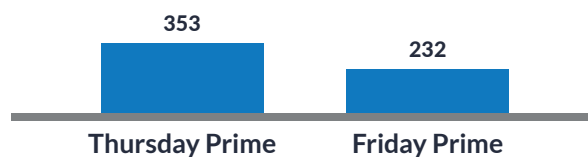
Note: Advertising lift measured on a 3-day rolling exposure window. Thursday/Friday Prime does not include: News, Sports, Children's or Spanish Language.
Source: Nielsen Catalina Solutions ©2017; Period 2016-Q1 2017

MEDIA: CONTEXT

Context matters, but we've yet to fully quantify its impact on sales. Stay tuned!

Context, the final element in the advertising effectiveness framework, has the smallest overall impact on sales. While context has the potential to provide strong benefits for advertising, it requires creating content that is properly matched to the surrounding program environment. In previous work, the only element NCS was

1   Joel Rubinson, Nielsen Catalina Solutions and Viant. 2017. *THE PERSUADABLES*: How Advertisers Can Use the Principles of Recency and Spend Level to Significantly Improve ROAS.

able to measure was the use of the same commercial across different genres—a far cry from pet food ads in pet-focused programs, or insurance ads right after the car crash in a TV drama. At this stage, we believe that the value that was measured is just a small fraction of the potential impact that context can have on advertising.

BEST-PRACTICE RECOMMENDATIONS

How can you use this information to improve advertising?

- Be accountable to sales—measure, measure, measure—or lose the dollars.

- Rethink your targeting approach—there's a lot of room for improvement, and big potential payoffs.

- Pay attention to the quality of your creative, especially for digital ads. Getting it right can increase digital ROAS significantly.

- Test and optimize your digital creative; use TV strategically to build reach; don't assume that targeting is working.

- TV creative is generally good (but don't lower your expectations and make sure you continue to test them thoroughly); TV is still the best way to get reach (despite a fragmented landscape); don't assume that age and gender are the only games in town.

- Study your consumers' buying patterns, and time your media exposures to be delivered within 48 hours of an anticipated purchase occasion.

"What we found through our Campaign Performance Audit (CPA) work to date is that there is a substantial ROI difference between advertisers using the television medium to its full effectiveness, and those using it less effectively. Our goal with the CPA program is to provide each of our advertisers with the resources to utilize the television medium to its full potential.

—David F. Poltrack
Chief Research Officer, CBS Corporation
President, CBS Vision

DATA SOURCES AND METHODOLOGY

This paper is based on insights from two meta-studies. Because these studies included all of the campaigns that occurred during the measurement windows (i.e. no "cherry picking"), they are a realistic representation of how campaigns are being executed today, to help inform improvements that can be made in the campaigns of tomorrow.

The first study was conducted by NCS and looked at nearly 500 CPG campaigns that ran in 2016 and Q1 of 2017 on all major media platforms: linear and addressable television, online digital and video, mobile, magazines and radio. Note that magazines and radio combined only represent ~1% of the total studies. The objective of this study was to examine the relative contribution that a campaign's creative and media factors might have on sales.
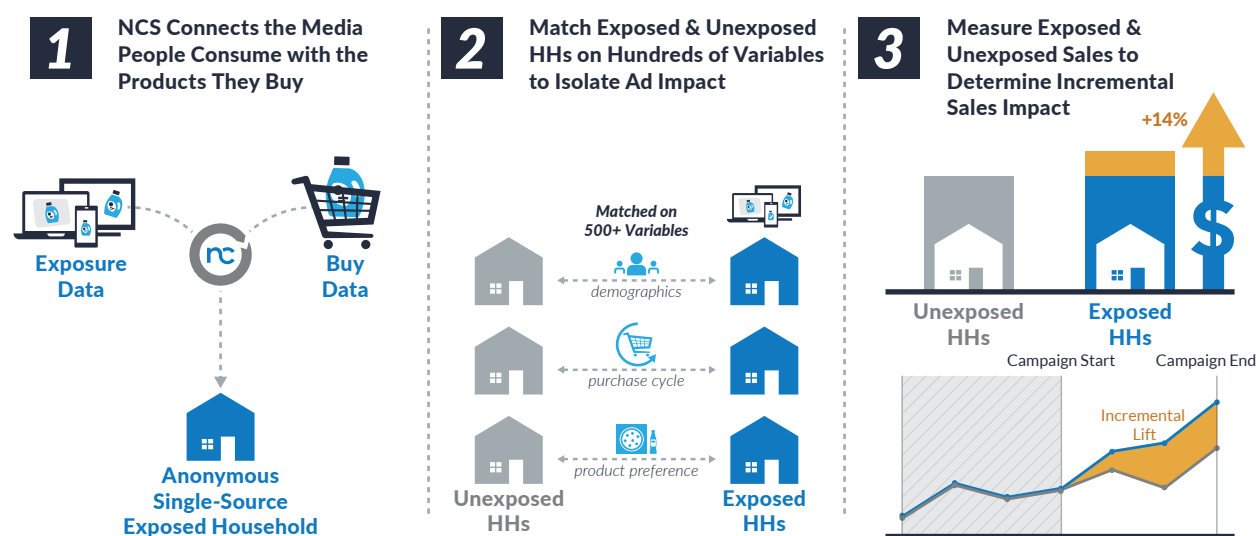
For the household-level sales data, NCS extracted in-store purchase data from a database of nearly 90 million households, matched those purchases to relevant ad exposures, and segmented the results against previous buyers and non-buyers of that particular brand and product category. NCS used a proprietary methodology that is based on machine learning and can isolate the sales effectiveness of media elements (e.g. reach and targeting) from the effectiveness of the creative.

The second study was conducted by Nielsen to understand the reach of TV and digital campaigns, and more importantly to measure the unduplicated reach of cross media campaigns. It looked at 863 campaigns that ran on both linear TV and digital platforms, and were tagged by Nielsen Total Audience (TAR) and Nielsen Digital Ad Ratings (DAR). These included all cross- media campaigns that ran in Q4, 2016 and Q1, 2017, regardless of vertical (not just CPG) or television network. The target for these analyses is people ages 13+.

Our objective was to use all available real data at scale to examine the link between advertising and sales to understand what contributed to advertising effectiveness.

NCS SALES EFFECT METHODOLOGY

1 NCS Connects the Media People Consume with the Products They Buy

Exposure Data

Buy Data

Anonymous Single-Source Exposed Household

2 Match Exposed & Unexposed HHs on Hundreds of Variables to Isolate Ad Impact

Matched on 500+ Variables

demographics

purchase cycle

product preference

Unexposed HHs

Exposed HHs

3 Measure Exposed & Unexposed Sales to Determine Incremental Sales Impact

+14%

Unexposed HHs

Exposed HHs

Campaign Start   Campaign End

Incremental Lift

ABOUT NCS

NCS is a joint venture between Nielsen and Catalina, helping advertisers and their agencies optimize return on advertising spend (ROAS). NCS integrates the largest, most representative in-store purchase dataset in the CPG industry from Catalina, connecting it with Nielsen's gold-standard TV currency as well as audience data for digital, mobile, print and radio.

With this unified source of data (known as single-source), NCS can identify the most responsive consumers, reach them with advertising wherever they are and measure the sales impact across platforms. Only NCS provides this purchase-centric approach consistently across all media platforms. Visit us at www.ncsolutions.com to learn more, or email hello@ncsolutions.com.

ABOUT NIELSEN

Nielsen Holdings plc (NYSE:NLSN) is a global performance management company that provides a comprehensive understanding of what consumers Watch and Buy. Nielsen's Watch segment provides media and advertising clients with Total Audience measurement services across all devices where content—video, audio and text—is consumed. The Buy segment offers consumer packaged goods manufacturers and retailers the industry's only global view of retail performance measurement. By integrating information from its Watch and Buy segments and other data sources, Nielsen provides its clients with both world-class measurement as well as analytics that help improve performance. Nielsen, an S&P 500 company, has operations in over 100 countries that cover more than 90 percent of the world's population. Visit us at www.nielsen.com to learn more.

DOES A BRAND NEED A CPA?

In the fall of 2014, CBS introduced the Campaign Performance Audit (CPA), a multi-stage program for measuring the effectiveness of advertisers' television advertising campaigns. The CPA uses a full complement of research and analytic tools to plan, execute and evaluate each television advertising campaign from the creation of the ad to the calculation of the total ROI of the campaign.

CBS and Nielsen Catalina Solutions have fine-tuned the measurement devices employed in the CPA to reveal the full potential of television advertising today. CBS wants to help buyers produce effective ads, find the right shows on which they should air, and measure the results using data from Nielsen, NCS and others.

We spend a considerable amount of time and resources every year to bring you insights from the latest measurement innovations and the best minds in the business. We hope that you find the effort worthwhile in furthering our collective knowledge for the industry.